

INCH-POUND

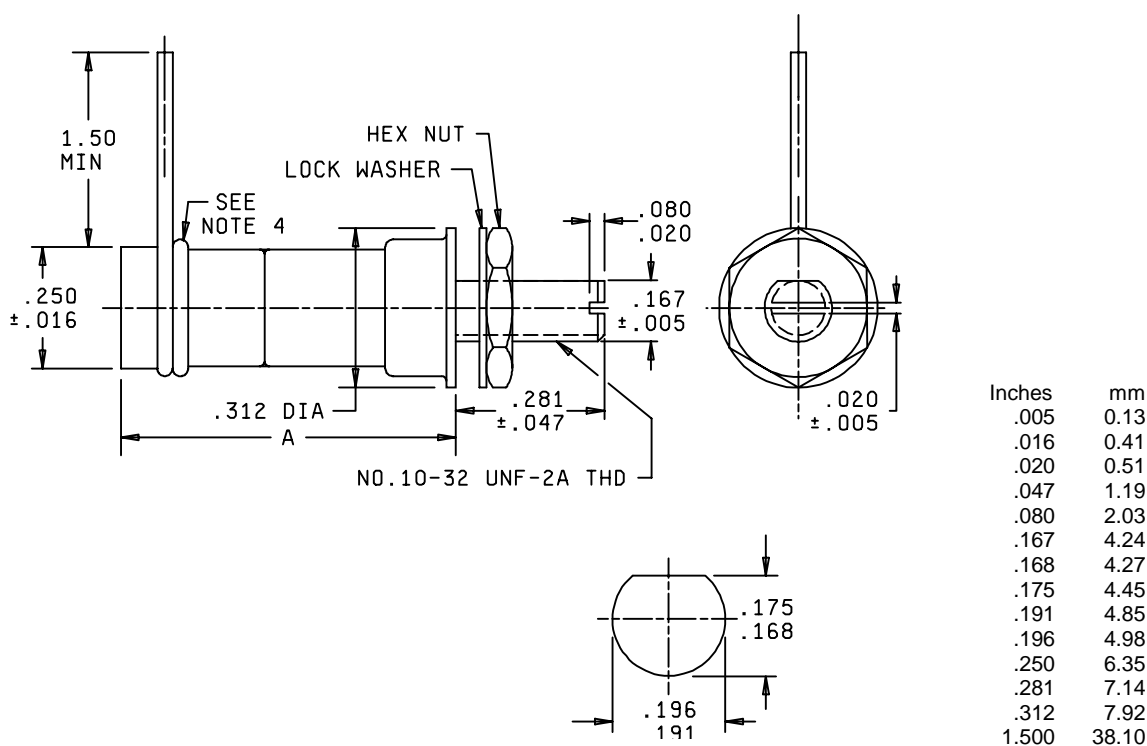
MIL-PRF-14409/6B  
25 July 2001  
SUPERSEDING  
MIL-PRF-14409/6A  
9 June 1969

PERFORMANCE SPECIFICATION SHEET

CAPACITORS, VARIABLE (PISTON TYPE,  
TUBULAR TRIMMER), STYLES PC40 AND PC50

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the capacitors described herein shall consist of this document and the latest issue of MIL-PRF-14409.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm.
3. Unless otherwise specified, tolerance is  $\pm 0.016$ .
4. There shall be a minimum of one and one-half turns of wire around the body. These turns shall be completely soldered to the body.
5. The flat on the mounting bushing shall extend to the mounting surface of the shoulder.
6. For dimension A see table I.

FIGURE 1. Dimensions and configurations.

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REQUIREMENTS:

Dimensions: See figure and table I.

DC voltage rating: 750 volts.

Construction: Glass or quartz, see figure and table I.

Insulation resistance (IR): Method 302 of MIL-STD-202, test condition B (500 volts  $\pm 10$  percent); not less than 1,000,000 megohms, except characteristics J and H shall be not less than 100,000 megohms at 125°C.

Capacitance range: See table I.

Quality factor (Q): See table I.

Temperature cycling: Method 102 of MIL-STD-202, test condition D, except the step 3 temperature shall be 125°C  $\pm 5^\circ\text{C}$  for characteristics J and H, and 150°C  $\pm 5^\circ\text{C}$  for characteristic Q.

TABLE I. Type designation and characteristics.

Type designation	Capacitance range		Dimensions 1/ A $\pm .047$ , $-.031$ ( $+1.19$ , $-0.79$ )	Q	Dielectric material	Wire size AWG
	Min	Max				
	pF	pF				
PC40Q1R8	0.6	1.8	.297 ( 7.54)	1,500	Quartz	24
PC40Q5R5	0.6	5.5	.547 (13.89)	1,500	Quartz	22
PC40Q9R5	0.6	9.5	.984 (24.99)	1,500	Quartz	22
PC40Q160	0.8	16.0	1.594 (40.49)	1,500	Quartz	22
PC50J5R5	0.8	5.5	.297 ( 7.54)	1,000	Glass	24
PC50J110	0.8	11.0	.547 (13.89)	900	Glass	22
PC50H160	0.8	16.0	.750 (19.05)	800	Glass	22
PC50H230	0.8	23.0	.984 (24.99)	700	Glass	22
PC50H380	1.0	38.0	1.594 (40.49)	500	Glass	22

1/ Metric equivalents (to the nearest 0.01 mm) are given for general information only and are based upon 1 inch = 25.4 mm. Millimeters are in parentheses.

TABLE II. Substitutability data.

Superseded type designation in MIL-C-14409/6	Substitutable type designation in MIL-PRF-14409/6A
PC40J4R5 and PC46J050	PC50J5R5
PC40J8R5 and PC46J100	PC50J110
PC40H120 and PC46H140	PC50H160
PC40H180 and PC46H190	PC50H230
PC40H300	PC50H380

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Custodians:

Army - CR  
Navy - EC  
Air Force - 11

Preparing activity:

DLA - CC

(Project 5910-2111-05)

Review activities:

Navy - AS, MC, OS